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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/552,808	10/11/2005	Bernhard Gleich	DE 030124	5527

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS
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EXAMINER	
GUPTA, VANI	

ART UNIT	PAPER NUMBER
3768	

MAIL DATE	DELIVERY MODE
10/02/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/552,808	GLEICH, BERNHARD	
	Examiner	Art Unit	
	VANI GUPTA	3768	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 July 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *5/3/07; 10/11/05*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☒ Other: *East search of related appli: 10/552,774*.

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of claims 1 – 14 in the reply filed on July 6, 2009 is acknowledged.

2. Applicant's cancellation of claims 15 – 51 without predjudice in the reply filed on July 6, 2009 is acknowledged.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1. ***Claims 1 – 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kraus, JR. et al. (US 6,470, 220 B1) in view of Wang et al. (US 6,940,286 B2).***

Regarding Claim 1, *Kraus, JR. et al.* (hereinafter *Kraus*) discloses a device for examination and use of an electrical field in a magnetic gradient field, containing magnetic particles in an examination area of an object under examination, comprising

a) at least one first arrangement for determining the spatial distribution of magnetic particles in at least one examination area of the examination object, comprising a means for generating a magnetic field with such a spatial profile of the magnetic field strength that a first sub-zone with low magnetic field strength and a second sub-zone with a higher magnetic field strength are produced in at least one examination area, a means for detecting signals ("SQUID,"

col. 7, ll. 60 – 67) which depend on the magnetization in the examination object, especially in the examination area, influenced by a local change in the particles, together with a means for evaluating the signals to obtain information about the, especially time-variable, spatial distribution of the magnetic particles in the examination area (col. 13, ll. 9 – col. 14, line 36).

However, Kraus does not suggest the second arrangement of Claim 1.

Nonetheless, Wang et al. teaches at least one second arrangement, comprising at least one electrical transmit and/or receive unit, comprising at least one voltage generator, at least one terminal contact connected to the voltage generator and applicable and/or fastenable to an object under examination *(**fig. 1**; Abstract; col. 4, ll. 60 – 65)*. It would be have been obvious matter of design choice to include a ground terminal, as one of ordinary skill in the art would be aware, for safety reasons so as to not electrocute a patient during examination.

It would have been prima facie obvious to modify Kraus to with Wang et al. to obtain additional information such electrical impedance distribution (col. 2, ll. 38 - 50) to complement the spatial distribution of magnetic particles studies performed by Kraus.

Regarding Claim 2, Wang et al. discloses that the device comprises at least one pair of contact electrodes, especially a plurality of pairs of contact electrodes, for recording potential differences (Abstract; and col. 5, ll. 1 – 55).

Regarding Claim 3, Wang et al. teaches that the device is characterized by at least one voltage measuring unit and/or current measuring unit (see rejection of claims 1 and 2).

Regarding Claim 4, Wang et al. teaches that the device is characterized in that the voltage generator, the voltage measuring unit and/or the current measuring unit may be brought into or are in active connection with a microprocessor or computer (***fig. 20***).

Regarding Claim 5, Wang et al. teaches that the second arrangement is characterized in that the voltage measuring unit and/or the current measuring unit is/are equipped with at least one analog filter, measuring amplifier, A/D converter and/or digital filter (col. 4, ll. 24 – 27).

Regarding Claim 6, Wang et al. teaches applying voltage to a region of interest (col. 5, ll. 17 – 19). Wang Nonetheless, as it would have been obvious to one of ordinary skill in the art at the time the invention was made to generate a voltage with the range of 10 V and 200 V, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only skill in the art. See *In re* Aller, 105 USPQ 233.

Regarding Claim 7, Kraus discloses that device is characterized by at least one frequency converter (col. 9, line 41 – Equation 1).

Regarding Claims 8, 9, and 12 – 14, Kraus discloses relevant characterizations (see rejection of Claim 1; col. 9, line 23 - col. 10, line 64; col. 13, 11. 16 - 18; and col. 14, 11. 9 – 15).

Regarding Claim 10, Kraus discloses that at least one coil arrangement, for changing the spatial position of the two sub-zones in the examination area, such that the magnetization of the particles varies locally (col. 13, ll. 9 – 14).

Regarding Claim 11, Kraus discloses that a coil arrangement, for changing the spatial position of the two sub-zones in the examination area by means of superimposition of an oscillating or rotating magnetic field, especially in the first sub-zone with low field strength (rejection of claim 1; col. 3, ll. 9 – 14 and 52 - 60; col. 9, ll. 65 - 67; and col. 11, line 58 - col. 12, line 5).

Conclusion

The following is prior art made of record, but not relied upon, is considered pertinent to applicant's disclosure:

1. US Pat 6,726,650 B2; Schneider et al.; "Automatic Liquid Injection System and Method"

2. US Pat 7,439,736 B2; Meaney et al.; "Imaging by Magnetic Resonance Adsorption, Elastography and Tomography."

3. US Pat 7,553,283 B2; Sandrin et al.; "Device and Method for Measuring Elasticity of a Human or Animal Organ and for Two-or-three-dimensional Representation Thereof."

4. US Pat 6,236,886 B1; Cherepenin et al.; "Method for Producig a Tomogrpahic Image of the Body and Electric Impedance Tomograph."

5. US PG Pub 2004/0092839 A1; Shin et al.; "Apparatus and Method for Measuring Local Skin Impedance using Multiple Array Electrodes."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to VANI GUPTA whose telephone number is (571)270-5042. The examiner can normally be reached on Monday - Friday (8:30 am - 5:30 pm; EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Long Le can be reached on 571-272-0823. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/V. G./
Examiner, Art Unit 3768

/Long V Le/
Supervisory Patent Examiner, Art Unit 3768